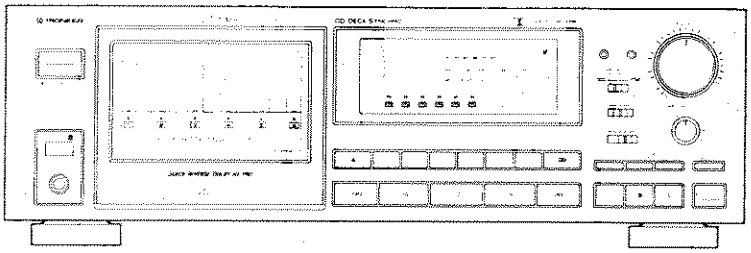
Operating Instructions

MULTI-CASSETTE CHANGER

CT-M6R
CT-M5R



This manual is applicable for both CT-M6R and CT-M5R. For convenience, the illustrations employed in the explanations are of CT-M6R.

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your unit properly. After you have finished reading these instructions, keep the manual in a safe place for, future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the drawings. However, the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write your serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

[Pour le modèle Canadien]

L'interférence radioélectrique gènèrée par cet appareil numérique de type B ne dépasse pas les limites énoncées dans le Règlement sur les perturbations radioélectriques, section appareil numérique, du Ministère des Communications.

[For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

LINE VOLTAGE SELECTOR SWITCH

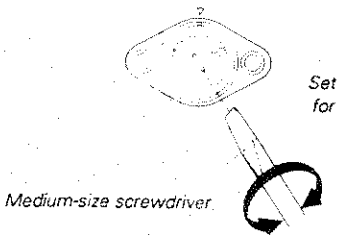
Only multi-voltage models are provided with this switch.

U.S., Canadian, European, U.K., and Australian models are not provided with this switch.

Mains voltages in Saudi Arabia are 127V and 220V only. Never use this model with 110V setting in Saudi Arabia.

The line voltage selector switch is on the rear panel. Before your model is shipped from the factory, this switch is set to the power requirements of the destination. Check that it is set properly before plugging the power cord into the AC wall socket. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switch as follows.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selector, and adjust so that the tip of the arrow points to the voltage value of your area.



Set the voltage selector for the voltage in your area.

Medium-size screwdriver

"This product complies with the Radio Interference requirements of the EC (European Community) Directive 87/308/EEC."

PIONEER®
The future of sound and vision.

IMPORTANT 1

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT 2

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last, make sure that the power switch is off.

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
Neither wire is to be connected to the earth terminal of a three pin plug.
Equipment sold in the U.K. is not supplied with a power plug.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS — The operating instrucions should be retained for future reference.

HEED WARNING — All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

WATER AND MOISTURE — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

LOCATION — The appliance should be installed in a stable location.

WALL OR CEILING MOUNTING — The appliance should not be mounted to a wall or ceiling.

VENTILATION — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

HEAT — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

POWER SOURCES — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

POLARIZATION — If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

CLEANING — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES — An outdoor antenna should be located away from power lines.

NONUSE PERIODS — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY — Care should be taken so that objects do not fall and inquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE — The appliance should be serviced by a Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped; or the enclosure damaged.

SERVICING — The user should not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, contact the nearest Pioneer authorized service center.

OUTDOOR ANTENNA GRAUNDING — If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A.

CART — An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

NEC – NATIONAL ELECTRIC CODE

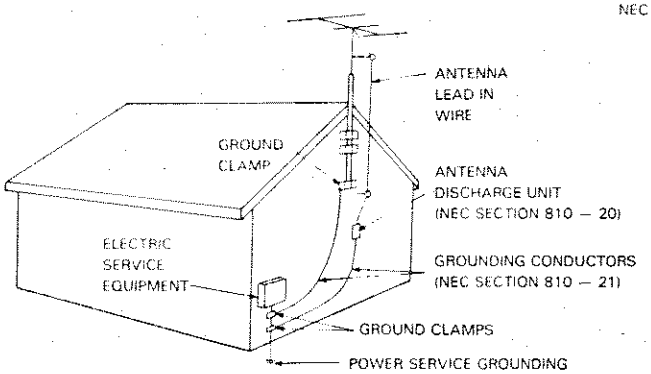

ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810 — 20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810 — 21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

FIG.A

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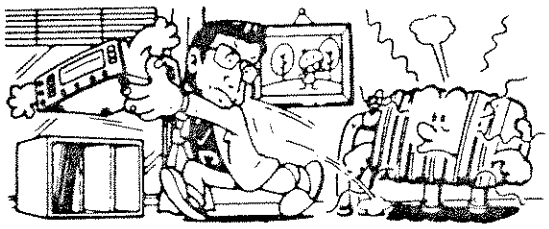
INSTALLATION

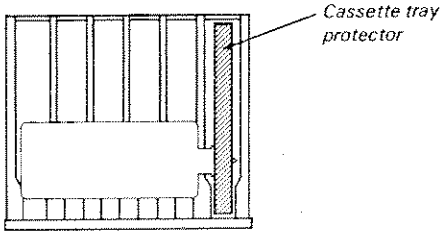
When installing the deck, avoid locations with high temperature or humidity, and be sure that the location is well ventilated.
Do not install the deck in locations subject to direct sunlight, or next to a space heater or other heating device, since the finish or internal parts may be affected adversely. Malfunctions may also result if the unit is installed in a humid or dusty location. Also avoid installations next to kitchen counters or other place subject to oily smoke or heat.



- If you place the unit directly on top of an amplifier, it may pick up humming or other noise. Also, if the amplifier generates a large amount of heat, the unit may break down.
- Place on a surface that is flat and level or almost flat and level.
- If you place the unit near a television set, it may pick up noise which may be recorded as a whistling tone on the tape. In such a case, either install the unit away from the television set or switch OFF the television set.

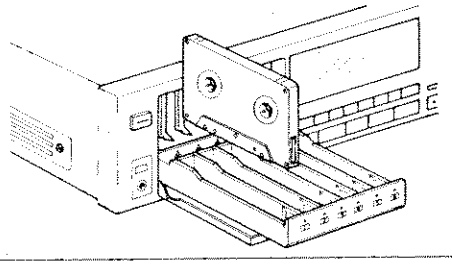
NOTE:
When installing the cassette deck, do not place a cloth over the top or block the ventilation openings in any other way.

NOTE:
Please take out this cassette tray protector before use and keep it for future use.
All cassette tapes must be removed from the cassette tray and tape transport area, and the protector must be replaced in slot 6 whenever the cassette deck is moved.



Head Cleaning

- A head cleaning cassette is necessary for cleaning of the recording/playback heads.
- To enjoy perfect performance and high-quality sound, clean the head periodically (once every 10 hours).
- Please use a commercially available "Wet type" cleaning cassette. (For details, refer to the instructions supplied with the cleaning cassette.) For more information, see "MAINTENANCE". (→ page 20)



INFORMATION TO USER [FOR U.S. MODEL]

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate this equipment with respect to the receiver
- move this equipment away from the receiver
- plug this equipment into a different outlet so that equipment and receiver are on different branch circuits

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems".
This booklet is available from the US Government Printing Office, Washington, D.C., 20402. Stock No. 004-000-00345-4.

The above instructions apply only to units which will be operated in the United States.

HOW TO HANDLE CASSETTE TAPES

CHECK CASSETTE BEFORE USE

Bear in mind the following points before loading cassette tapes.

Is the tape loose, or is some of the tape outside the cassette?

If some of the tape is projecting outside the cassette shell or if it is loose, it may not enter between the capstan and pinch roller. This will prevent the tape from being supplied or damage the tape itself. In cases like these, insert a pencil into the reel hole and take up the slack (Fig. A.).

Some cassette tapes come with a plastic or thick paper stopper which prevents tape slack. Remove this stopper when loading the tape and replace it after having used the cassette.

What are the accidental erasure prevention tabs for?

A cassette is provided with these tabs so that important or otherwise valuable recordings will not be erased accidentally.

When the tab (Fig. B) on the cassette shell is broken off with the tip of a screwdriver, it will not be possible to activate the recording function even by pressing the recording button, so valuable recordings will not be erased in error. To re-record a cassette on which tabs have been broken off, simply stick a piece of double adhesive tape over the tab areas, as shown in Fig. C.

In case of metal or chrome tape, take sufficient care that the sensor hole (Fig. D, E, F) is not blocked.

When this hole is blocked, the automatic tape selector mechanism does not operate correctly.

NOTE:

The accidental erasure prevention tabs are located at the top left on both sides A and B (1 and 2), so that material on each side can be prevented from being erased in error.

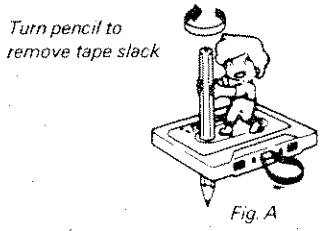


Fig. A

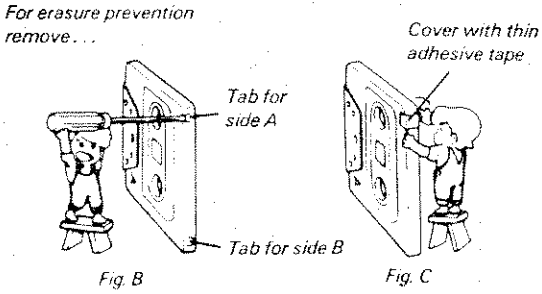


Fig. B Fig. C

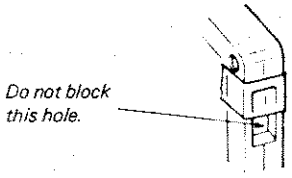


Fig. D

AUTOMATIC TAPE SELECTOR FUNCTION

This unit is equipped with an automatic tape selector function which utilizes the sensor holes on the tape cassette to determine the type of tape being used, in order to set the deck to match the tape recording bias and equalization.

REGARDING THE TAPE CASSETTE SENSOR HOLES

- Do not use FeCr tapes with this unit.
- When using metal tapes, be sure the tape cassettes have sensor holes.

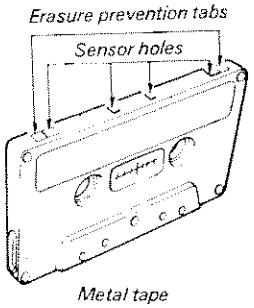


Fig. E

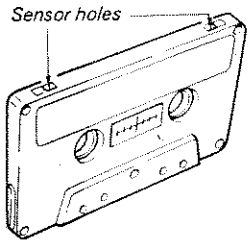


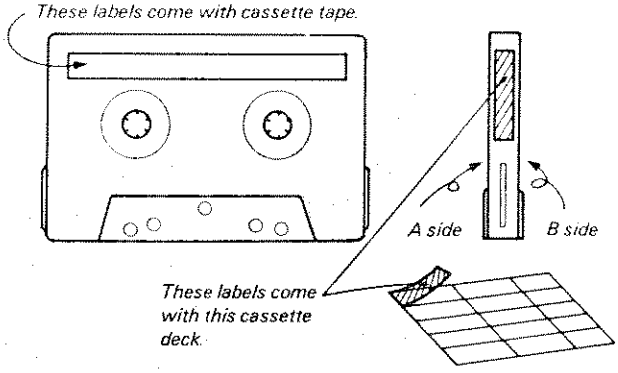
Fig. F

TIPS ON USING CASSETTE TAPES

- It is recommended to completely fast forward and fast reverse the tape before recording. This prevents the damage to the cassette deck due to irregular wound tape.
- Leader tape (which does not allow sound to be recorded on it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for about 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack. Choose a location which is not exposed to the effects of magnetism, moisture, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other trouble such as irregular winding. Try not to use them with this unit.

This unit contains a precision loading mechanism. Special care needs to be taken when using the following types of cassette tape:

- Old cassettes with torn or loose cassette labels.
- Cassettes without clearly specified labels.
- Cassettes with overlapping labels.



- Attach the cassette label securely.
- If the cassette label is peeling off, using such a tape may damage the unit.

CONNECTIONS

- Read through the operating instructions of the stereo components which you intend to connect to this unit.
- Turn on the power only after all the connections are completed.
- Make sure that the plugs are inserted securely. Improper connection may generate noise.

CD-DECK SYNCHRO jack
If this unit is used together with a PIONEER CD player equipped with the synchro function, synchro recording from the CD player can be carried out with one touch of a button. (→page 18)
Use the supplied CD-Deck synchro control cord to connect the CD-DECK SYNCHRO jack on this unit to the CD-DECK SYNCHRO jack on the CD player.

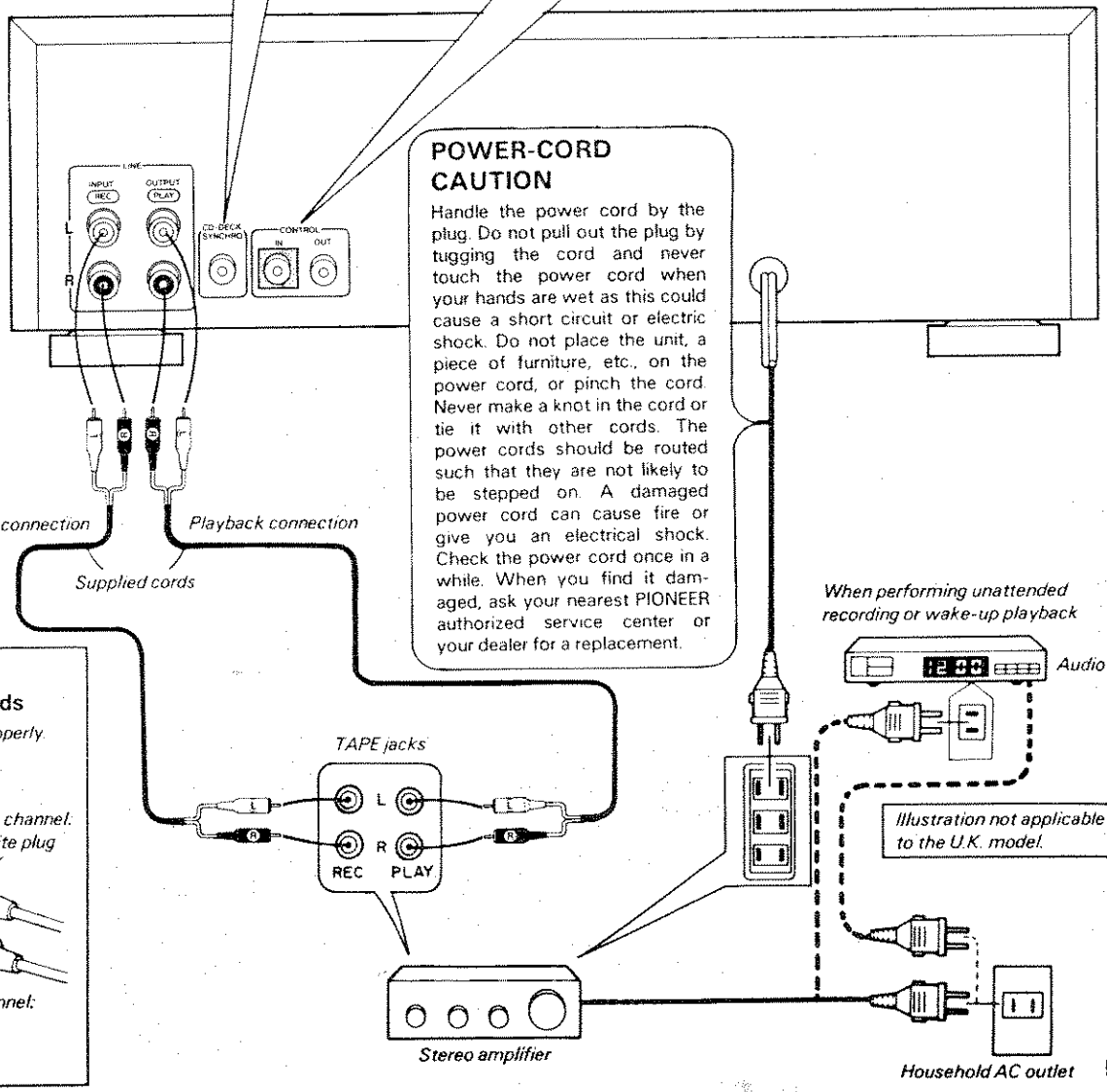
For CT-M6R, CT-M5R (U.S., Canadian, Australian and Multi-voltage models) PIONEER System remote control

Connect the CONTROL IN jack to a component equipped with the PIONEER System remote control (bearing the SR mark), and you will be able to operate this component from the hand-held remote controller that comes with the component connected.

NOTE: (CT-M6R U.S., Canadian and Australian models only)
When the system remote control cord is connected to the CONTROL IN and CONTROL OUT jacks, the remote control sensor window does not operate.

CONTROL IN jack
Connect the jack to the CONTROL OUT jack of a component equipped with the PIONEER System Remote Control (bearing the SR mark) using the supplied mini-plug cord, and you will be able to operate this component using the system remote control.

CONTROL OUT jack
Intermediary output of remote control signals from the above input jack. Connect it to the CONTROL IN jack of another component compatible with the Pioneer System Remote Control.

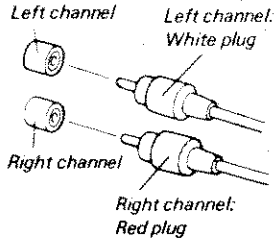


POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

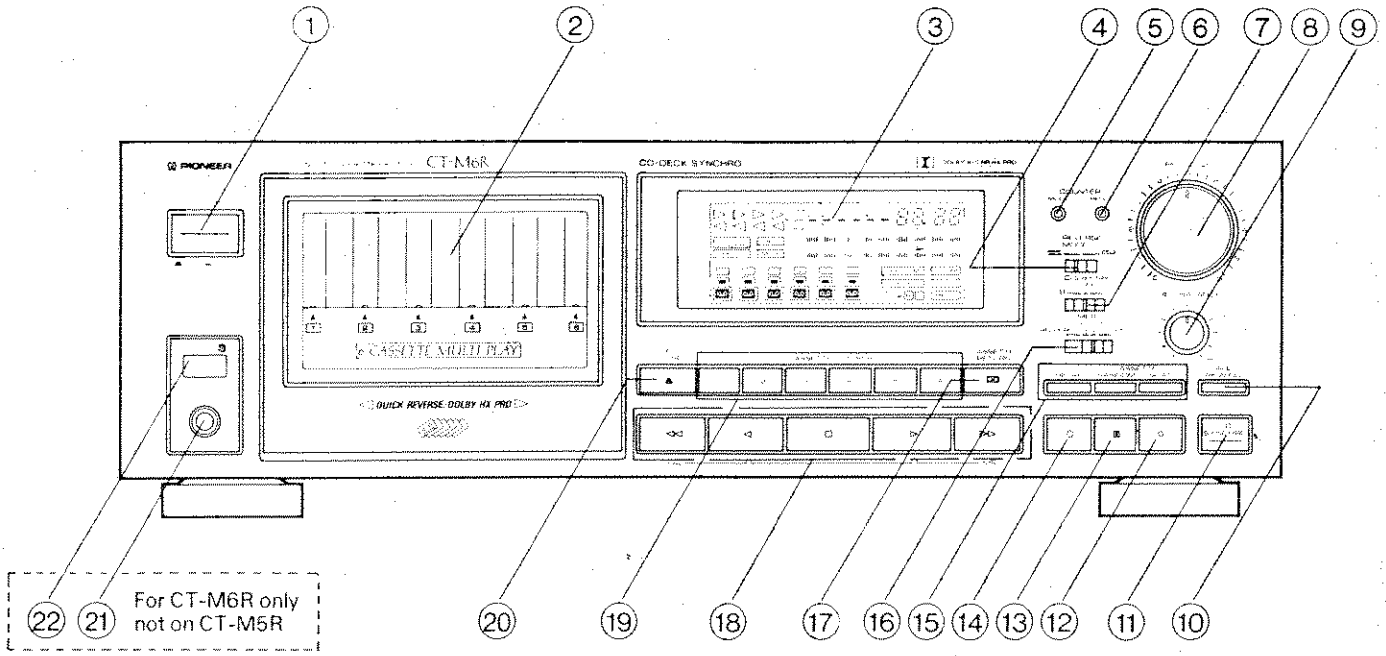
Connecting the input/output cords

Connect the plugs properly.



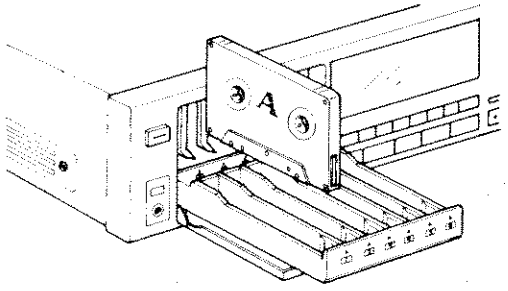
FRONT PANEL FACILITIES

Illustration shows CT-M6R



① **POWER switch**
Approximately 8 seconds after the POWER switch is pressed ON, the circuits become stable and operations can be carried out.

② **Cassette door and tray**
Press the OPEN/CLOSE button, and the door opens and the tray slides out. Insert the cassette so that the "A" side is on the left and the exposed (tape) side is facing down. When you press the OPEN/CLOSE button again, the tape tray will automatically close.
Tape counter display shows OPEN when the tray slides out.



NOTE:
If the tray is open and contains a cassette, cassette loading and the following operations can be carried out automatically without pressing the OPEN/CLOSE button:
▶ : Forward play, ◀ : Reverse play, SCAN, RANDOM and ALL REWIND buttons.

Caution: Place the cassette tapes correctly on the tray and do not place anything other than cassette tapes on the tray.

③ **Display window** (→page 9)

④ **REVERSE MODE switch**
Choose the tape transport mode.
⇉ : Tape transport stops after one side of a tape is played or recorded.
When the RELAY button is pressed, play or recording continues on the next numbered cassette until the highest numbered cassette is reached.
⇆ : During playback of the cassette you wish to hear, both sides of the tape are played back continuously until 16 sides have been played back.
In the record mode, both sides of the tape are recorded once and then tape transport stops.
When the RELAY button is pressed, after a cassette finishes, playback or recording continues on the next cassette until the highest numbered cassette is reached. (→page 14, 15)

⑤ **COUNTER/MODE button**
Switches between the tape counter display and the time counter display.

⑥ **COUNTER/RESET button**
Sets the tape counter display to 0000 and the time counter display to 00.00.

⑦ **DOLBY* NR switch**
When in the recording mode, switch to B-type or C-type Dolby Noise Reduction, or to OFF.
When playing back Dolby NR-encoded tapes, always set this switch to the same position (B-type or C-type) used for recording.

*
For CT-M6R
- *Dolby noise reduction and HX PRO headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX PRO originated by Bang & Olufsen.*
- *"Dolby", the double-D symbol ◫ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.*

*
For CT-M5R
- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"Dolby" and the double-D symbol ◫ are trademarks of Dolby Laboratories Licensing Corporation.*

⑧ **REC LEVEL control**
(→page 13)

⑨ **REC BALANCE control**
(→page 13)

⑩ **ALL REWIND button**
Press this button to rewind all tapes automatically, starting with the lowest numbered tape on the tray. The counter display changes to " RL L " during this operation.
If the tray is open, it will automatically close by pressing this button.

⑪ **CD SYNCHRO button**
This button is used to carry out CD-Deck synchro recording from a CD player. (→ page 18)

⑫ **Recording mute button (O)**
When this button is pressed during recording, the deck creates a 4-second blank space on the tape and then enters record-pause mode.
When you hold this button down, a continuous blank space is created until you release this button. (→ page 14)

⑬ **Pause button (▮▮)**
Press this button when it is desired to temporarily pause playback or recording. Press the button again to resume playback or recording. The pause button cannot be used during fast-forward or rewind. Recording can begin when this button is pressed after pressing the recording (●) button.

⑭ **Recording button (●)**
When this button is pressed, the deck enters record-standby mode. Recording begins when the play ▶ (or ◀) button or pause (▮▮) button is pressed.

⑮ **CASSETTE control buttons**

RELAY: Press this button to relay record or playback the cassettes on the tray. (The RELAY indicator lights.)

RANDOM: Press this button to playback all cassettes on the tray in a random order. (The RANDOM indicator lights.)
The unit will stop when one side (in the ⇉ mode) or both sides (in the ⇄ mode) have been fully played back.

SCAN: Press this button to playback each cassette on the tray for about 10 seconds starting from the lowest numbered cassette. (Counter display changes to " SC AN ")

NOTE:
If a blank section is played back for approximately 15 seconds, the blank skip function will come into effect. The tape is automatically forwarded to the beginning of the next selection and then playback begins.

⑯ **TIMER switch**

RELAY REC: Set to this position for relay recording by timer.

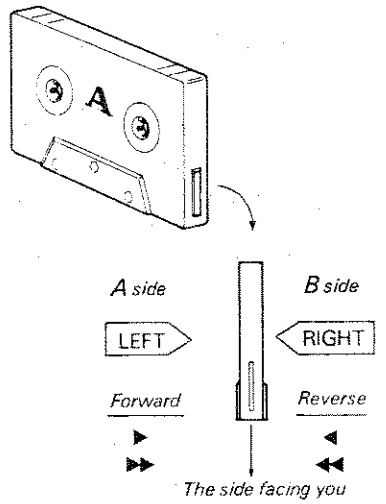
REC: Set to this position for a single cassette recording by timer.

OFF: Set to this position when not using the timer. (The switch should normally be set to this position.)

PLAY: Set to this position for playback by timer. Also set to this position for relay playback by timer with multiple cassettes.

⑰ **CASSETTE RETURN button**
Press this button to return the loaded cassette to the tray.

⑱ **Operation buttons**
NOTE:
Please keep in mind the illustration below to insure proper operation of your unit.



Fast-forward ▶▶:
When this button is pressed during stop mode, the tape is fast-forwarded in the direction of the arrows. When pressed during playback, the playback position skips forward by one selection for each press of the button (up to 15 selections), and playback resumes at the beginning of the designated selection. (Music search — page 16)

Reverse play ◀:
Press this button to play back or record on the reverse side of the tape (the right side). (Reverse playback/recording)
Used to start recording in record-standby mode.
If the tray is open, it will automatically close and if a cassette is not loaded, the lowest numbered cassette will be loaded then playback will occur.

Stop ■:
Press this button to stop the tape transport.

Forward play ▶:
Press this button to play back or record on the forward side of the tape (the left side). (Forward playback/recording)
Used to start recording in record-standby mode.
If the tray is open, it will automatically close and if a cassette is not loaded, the lowest numbered cassette will be loaded then playback will occur.

Fast-reverse ◀◀:
When this button is pressed during stop mode, the tape is fast-forwarded in the direction of the arrows. When pressed during playback, the playback position skips forward by one selection for each press of the button (up to 15 selections), and playback resumes at the beginning of the designated selection. (Music search — page 16)

FRONT PANEL FACILITIES

⑲ **CASSETTE NUMBER buttons (1 ~ 6)**
Press one of these buttons to specify a cassette to be loaded from the tray.
Press one of these buttons and the Play (▶ or ◀) button to load a cassette and start playback.
Press one of these buttons and the recording (●) button to load a cassette and put in the record-standby mode.
Press one of these buttons and the fast forward (▶▶) or fast forward (◀◀) button to load a cassette from the tray and start fast-forwarding or rewinding.
If a play button (▶ or ◀) is pressed without one of these buttons, the lowest numbered cassette will be loaded and the operation will start.

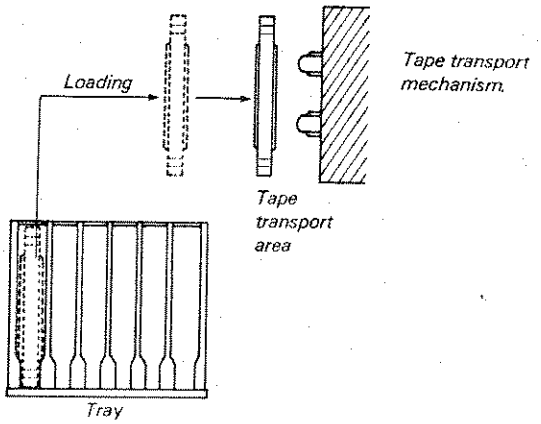
⑳ **OPEN/CLOSE button (≙)**
When a cassette tape has been loaded, you can change the cassettes on the tray except for the loaded cassette number. Use the OPEN/CLOSE button to open and close the door.

***NOTE**: This deck cannot operate the cassette tray without the power switch at the ON position.*

㉑ **PHONES jack (CT-M6R only)**

㉒ **Remote Control Sensor Window (CT-M6R only)**

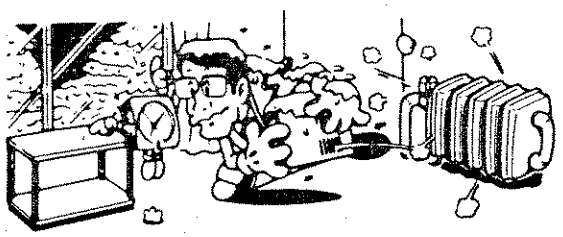
Load: Loading is the procedure in which a cassette tape is removed from the tray and set in place at the tape transport area.



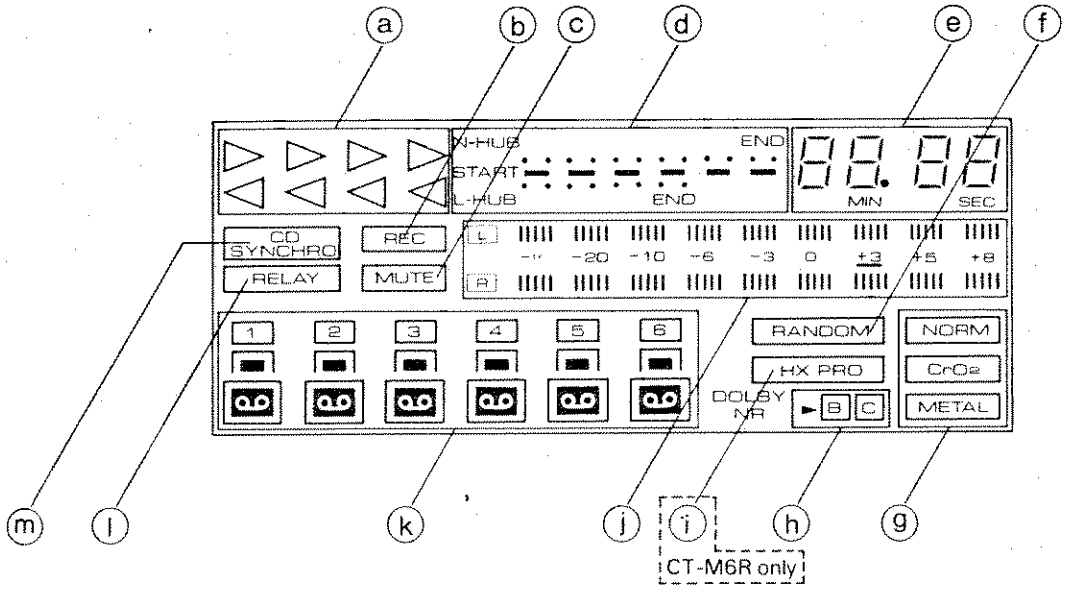
AUTO REVERSE MECHANISM
This unit uses the same rotary recording/playback head for both the forward and reverse directions.
The auto reverse mechanism detects the leader tape section of a tape and immediately reverses the tape transport to make the absence of sound as short as possible.
As the auto reverse operation functions by optically detecting the difference between the magnetic particle section and the leader tape section (transparent tape), this operation may malfunction in the following situations:
- The auto reverse mechanism may not detect the leader tape within the first 10 seconds from when the tape is started.
- When characters or marks are printed on the leader tape.
- When the tape is damaged.

DEW CONDENSATION

When the unit is moved from a cold to a warm room, or the temperature changes quickly, condensation will form on the mechanical parts and this will affect the performance of the tape. In such cases, leave the unit in a warmer atmosphere for about one hour or change the room temperature gradually.



DISPLAY WINDOW



ⓐ **Tape running indicator (▷▷▷▷ / ◁◁◁◁)**
Indicates the direction of recording or playback, or of fast-forward or rewind. These indications should flash when the deck is in the recording pause or play pause. (→ page 11)

ⓑ **Recording indicator (REC)**
Lights when the record button is pressed.

ⓒ **Recording mute indicator (MUTE)**
Lights or flashes when the recording mute (O) button is pressed during recording.
Flashes when you press the recording mute (O) button once. If you press the button down for more than 4 seconds, it will light up after flashing for 4 seconds. (→ page 14)

ⓓ **Remaining Time indicators**
Indicate the approximate remaining time of a tape when the deck is in the record or playback mode. When the tape is close to the end, each indicator will flash and then go off in sequence.
(→ page 12)

ⓔ **Tape counter/time counter/music search selection number display**
Tape counter:
The number on the display is incremented (or decremented) as the tape is advanced (or rewound). (→ page 12)
Time counter:
Indicates the amount of time which has elapsed since the start of playback or recording up to 99 minutes 99 seconds.
- The display switches between the tape counter and the time counter each time the COUNTER MODE button is pressed.

Music search selection number display:
Displays the number or the selection being searched for during music search mode. (→ page 16)

ⓕ **RANDOM play indicator**
Lights when the deck is in the random play mode.

ⓖ **Tape type indicators (NORM, CrO_2, METAL)**
The tape type (NORMAL, CrO_2, METAL) of the currently loaded tape is automatically detected and displayed.

ⓗ **Dolby B/C NR indicator**
Indicates Dolby B-type or C-type noise reduction.

ⓘ **Dolby HX PRO indicator (CT-M6R only)**
This unit is provided with a built-in Dolby HX PRO Headroom Extension circuit. The Dolby HX PRO indicator always appears on the display when the POWER switch is turned on.

ⓙ **Level meter**
Indicates the left and right channel signal levels. Indicates the recording level during recording, and the recorded level during playback. The — mark under +3 indicates the Dolby noise reduction system standard level.

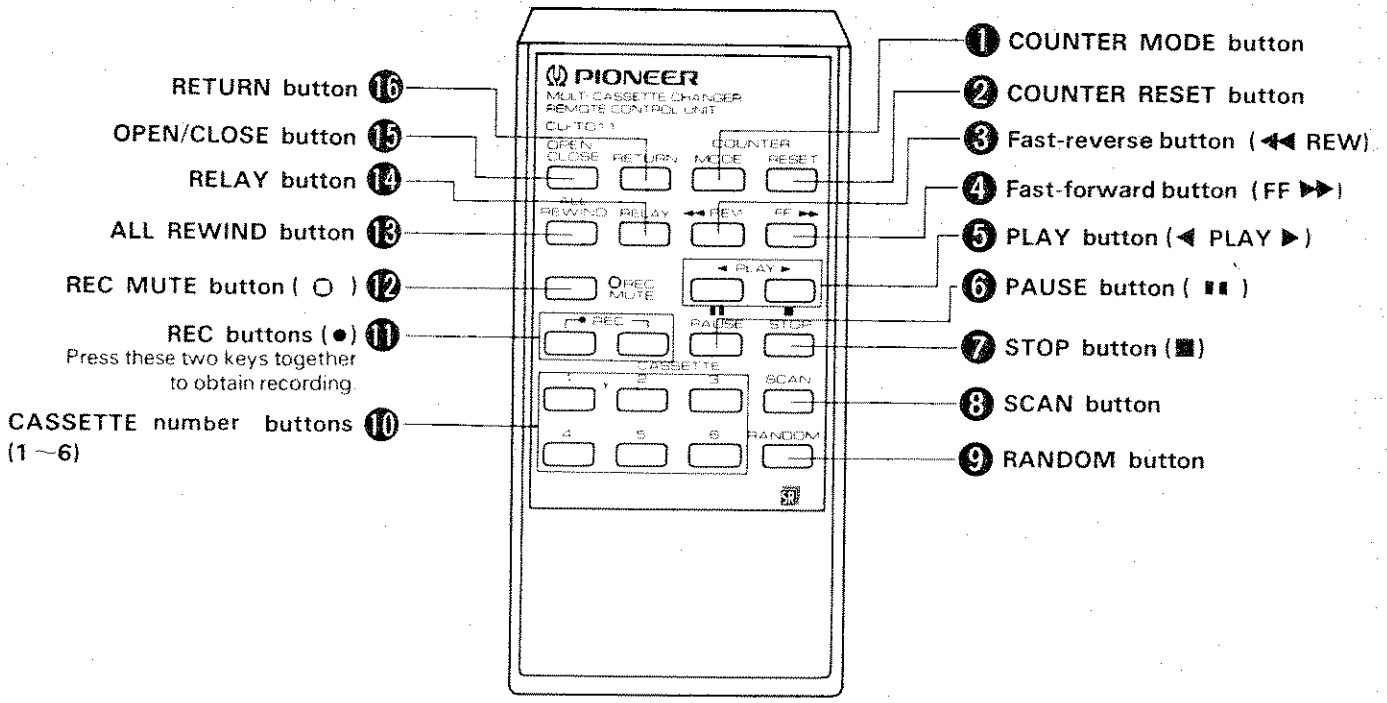
ⓚ **Cassette Storage indicators**
Cassette number (always on)
5 Lights when deck chooses by random playback
Lights when cassette has been loaded; flashes when being loaded from the tray to the tape transport mechanism or vice versa
Lights when the cassette is on the tray.

ⓛ **RELAY indicator**
Lights when the deck is in the relay mode.

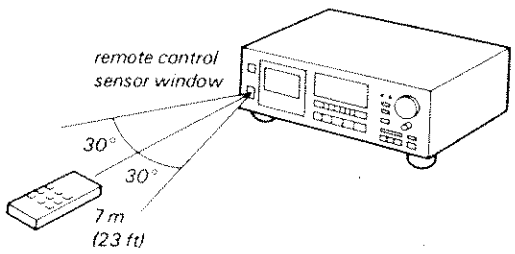
ⓜ **CD SYNCHRO indicator**
Lights when synchro recording from a CD player is being carried out. It will flash if relay synchro recording is not operating properly. (→ page 18)

REMOTE CONTROL UNIT (CT-M6R only)

- Remote control unit can operate the cassette deck with the same buttons.

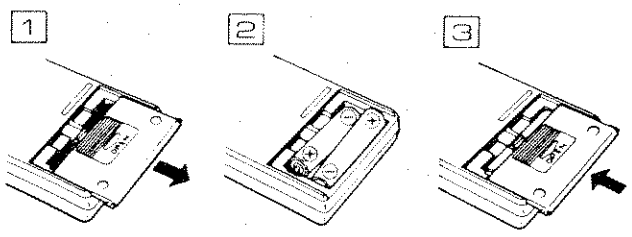


- **Range of remote control**



- Remote control will not be possible if there is an obstacle between the remote control unit itself and the deck remote control sensor window.
- If there is no response even when the remote control is used directly in front of the deck, the batteries may need replacement.
- Performance of the remote control unit is adversely affected in the presence of strong fluorescent light. Keep such lights away, specially from the sensor window.

- **Inserting the batteries into the remote control unit**



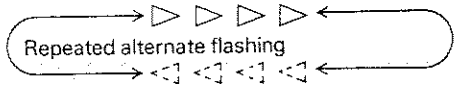
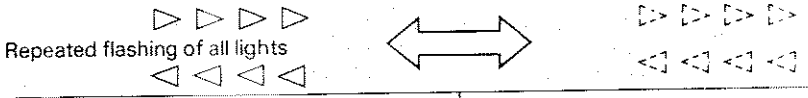
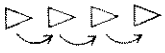
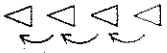
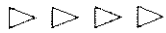
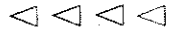
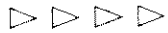
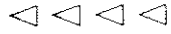
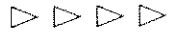
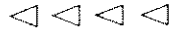
(1) Remove the cover of the battery compartment on the reverse side of the remote control unit. This can easily be done by pressing down on the cover with your thumb and pulling it in the direction of the arrow.
(2) Take out the two size "AAA" [IEC-R03 (UM-4)] dry cell batteries supplied and load them into the battery compartment, taking care to follow the markings on the compartment.
(3) Replace the cover of the battery compartment.

Handling the batteries:

- Do not use new batteries and old batteries, or different types of batteries together.
- Under normal use, the batteries will last approximately six months. Always remove the batteries if you do not intend to use the remote control unit for a long duration (over one month).
- In the event of leakage, replace with new batteries after wiping the inside of the case thoroughly.

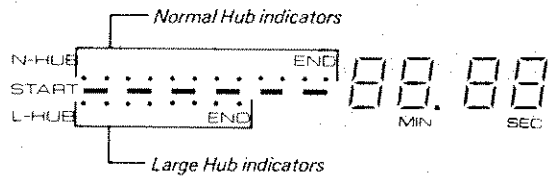
INDICATORS

Tape running indicator

When power switch ON		
"Perform the following" indication		
Mode	**Forward**	**Reverse**
Playback Record	Flashing steadily to the right 	Flashing steadily to the left 
Fast forward and MS	Flashing faster than with playback	—
Fast reverse and MS	—	Flashing faster than with playback
Stop	Lights up 	Lights up 
Recording pause	Flashing 	Flashing 
Play pause	Flashing 	Flashing 

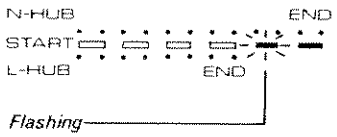
INDICATORS

Tape Remaining Time indicators
Indicate the approximate remaining time of a tape when the deck is in the record or playback mode. The actual remaining time varies depending on the size of the hub.



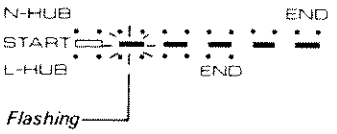
When the tape is close to the end, each indicator will flash and then go off in sequence. One indicator represents approximately 2 minutes of time when using C-60 or C-46 cassette tapes. It represents approximately between 2 minutes 30 seconds and 3 minutes for a C-90 tape.

Example:
Playing back for normal hub of a C-90 tape.



2 min. 30 sec. × 2 indicators = approximately 5 minutes remaining

Example:
Playing back for large hub of a C-46 tape.

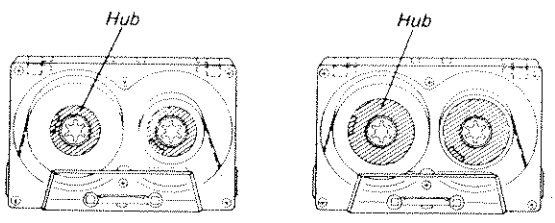


2 min. × 3 indicators = approximately 6 minutes remaining

When the END indicator of the N-HUB or L-HUB is flashing, the tape will finish soon

Caution:
The Tape Remaining Time indicator may operate a little differently depending on the thickness of the tape and the size of the hub.

- The size of the large hub is about 1-1/16 in. (27 mm). If the hub is larger, the Remaining Time indicator may be in error.



USING THE COUNTER
The counter provided on this unit can be switched between the tape counter and the time counter by pressing the COUNTER MODE button (5).
Tape counter:
The number displayed on this counter changes according to the running of the tape.
Time counter:
This counter displays the amount of time (in minutes and seconds) which has elapsed since the start of playback or recording.
Before starting playback or recording, press the COUNTER RESET button (6) to reset the tape counter to 0000 and the time counter to 00.00. Jotting down the value displayed on the counter at important points during recording or playback makes it easy to find those points later.

Time counter
The time counter displays only the recording or playback time. If a fast-forward, rewind, or music search operation is carried out during recording or playback, the time count stops and the counter display switches to the tape counter. When recording or playback is resumed, the time count begins again.

Do not turn off the power in mid-operation
When the POWER switch (1) is switched OFF and then ON again, the counter is reset to 0000 of the tape counter mode. Do not turn the power off while the counter is counting.

■ The Dolby NR Systems
The Dolby NR systems are designed to reduce high-frequency noise (tape hiss) generated during playback. The level of low-volume, high-frequency sounds is increased during recording, and decreased by the same amount during playback to restore the original level. At the same time, high-frequency noise (the most easily perceived by the human ear) is attenuated as well.
Dolby B-type NR system reduces high-frequency tape noise, widening the dynamic range.
Dolby C-type NR system is even more powerful, applying the noise reduction effect to a wider spectrum of frequencies from the middle range.

■ The Dolby HX PRO Headroom Extension System (CT-M6R only)
When recording audio signals on a magnetic tape, high-frequency signals are recorded on top of each other (recording bias) in order to compensate for the tape Recording bias depends on the frequency of the recorded sound, but generally it is fixed to a value which gives acceptable results over the whole frequency range.
The HX PRO system reads in the signal at the recording head, adjusting recording bias amplitude according to the signal condition to achieve optimum recording characteristics.

NOTE:
Avoid playing back tapes recorded using the Dolby NR systems with the DOLBY NR switch in the OFF position, or tapes recorded without Dolby NR systems with the DOLBY NR switch in the ON position (B or C), since this does not allow faithful reproduction of the original sound.

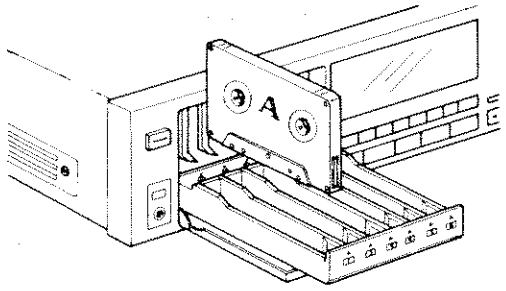
RECORDING

- Before turning on the POWER switch, ensure that the TIMER switch is set to OFF. If the TIMER switch is set to REC, RELAY REC or PLAY, recording or playback will begin automatically approximately 8 seconds after the POWER switch is turned on.

1. Press the POWER switch①.

2. Place the cassettes on the tray.

Press the OPEN/CLOSE button ⑳ and the tray will automatically slide out. Insert the cassette so that the "A" side is on the left and the exposed (tape) side is facing down. The tray can hold up to 6 cassettes at once.



3. Press the OPEN/CLOSE button ⑳ to close the tray.

4. Press one of the Cassette Number buttons ⑲ to load the cassette for recording.

5. Select the tape transport mode with the reverse mode (REVERSE MODE) switch④.

To record on both sides of the tape, set the switch to the " ↻ " position. To record on only one side of the tape, set the switch to the " ⇉ " position.

6. Select the Dolby noise reduction systems with the DOLBY NR switch⑦.

7. Press the recording (●) button ⑭ to enter the recording standby mode.

8. Adjust the recording level using the REC LEVEL control ⑧.

Operate the amplifier to play the source you plan to record and use the REC LEVEL control ⑧ to adjust the level to the signal displayed on the level meter. (See the "SETTING THE RECORDING LEVEL" section.)

9. Start recording by pressing the appropriate play (▶ or ◀) button ⑱ or the pause (▮▮) button ⑬.

Single side recording (REVERSE MODE switch: ⇉)

To record on the forward side of the tape (the left side):

Press the ▶ button. (Forward recording)

To record on the reverse side of the tape (the right side):

Press the ◀ button. (Reverse recording)

Double side recording (REVERSE MODE switch: ↻)

Press the ▶ button. If the ◀ button is pressed, recording will stop after only one side is recorded. Switching from the REV direction to the FWD direction in this state is not possible.

NOTE:

During recording, the CASSETTE RETURN and CASSETTE NUMBER buttons can not operate.

To stop recording

Press the stop (■) button⑯.

To pause recording

Press the pause (▮▮) button⑬. To resume recording, press the pause button again or press the appropriate play (▶ or ◀) button⑱.

SETTING THE RECORDING LEVEL

Adjustment of the recording level is a key point in making recordings with good sound quality. It is necessary to set the recording level as high as possible in order to optimize the signal-to-noise ratio and expand the dynamic range. However, if the recording level is set excessively high, the recorded sound will be distorted. On the other hand, if in order to avoid distortion the recording level is set too low, tape hiss noise will become noticeable. If the maximum level of the sound to be recorded is set right at the limit (the maximum recording level) of the tape, the characteristics of the tape will be fully utilized and good sound quality will result. The maximum recording level of a tape depends on its type, so it is necessary to make adjustments to match the type of tape in use.

With normal (NORM) and chrome (CrO_2) tapes, use the REC LEVEL control ⑧ to adjust the recording level so that the +5 dB indicator on the level display lights occasionally. With metal (METAL) tapes, adjust the recording level so that the +8 dB indicator on the level display lights occasionally.

The level meter provided on this unit has a peak hold function. This function holds the peak level for 1.2 seconds to facilitate adjustment of the recording level.

Actually, the optimum recording level also varies slightly according to the type of music or brand of tape. To fully utilize tape characteristics and make even better quality recordings, it is also important for you to listen to your recordings to check the playback sound and make adjustments if necessary.

Recording balance adjustment

Use the REC BALANCE control ⑨ to compensate for unbalance of the left and right channels due to the source to be recorded or equipment to be used. Rotating the control in the L direction increases the level of the left channel. Rotating the control in the R direction increases the level of the right channel.

RELAY RECORDING

The order of the recording will go from the lowest numbered cassette to the highest numbered cassette if the RELAY button ⑮ is pressed during recording or if the RELAY button ⑮ is pressed in the stop mode and then the recording (●) button ⑭ is pressed after pressing play (▶ or ◀) button ⑱.

If a cassette tape from which the erasure prevention tabs have been removed is in the tray, the deck will skip that tape and relay to the next cassette tape. This applies to all tapes from the second onwards.

TO CREATE BLANK SPACES BETWEEN SELECTIONS

Auto recording mute:

While the deck is recording, press the recording mute (O) button ⑫. The MUTE indicator flashes and the deck will create a non-recorded blank section of approximately 4 seconds on the tape and then enter record-standby mode. To resume recording, press the pause (▮▮) button ⑬.

Recording mute:

If the recording mute (O) button ⑫ is pressed and held, the deck will create a non-recorded blank section on the tape of more then 4 seconds for as long as the button is held pressed. The deck will enter record-standby mode when the button is released.

The deck will not record on cassette tapes from which the erasure prevention tabs have been removed.

Check to see if the erasure prevention tab on the side of the tape to be recorded on is still intact. If both sides of the tape are to be recorded on, check to make sure that both erasure prevention tabs are intact. (— page 4)

To erase the recorded contents

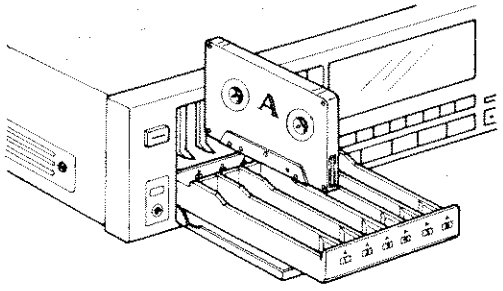
1. **Set the REC LEVEL control ⑧ to the "0" position.**
2. **Press the recording (●) button ⑭.**
3. **Press the play (▶ or ◀) button ⑱ or pause (▮▮) button ⑬.**

PLAYBACK

1. Press the POWER switch ①.

2. Place the cassettes on the tray.

Press the OPEN/CLOSE button ⑳ and the tray will automatically slide out. Insert the cassette so that the "A" side is on the left and the exposed (tape) side is facing down. The tray can hold up to 6 cassettes at once.



3. Press the OPEN/CLOSE button ⑳ to close the tray.

4. Press one of the Cassette Number buttons ⑲ to load the cassette for playback.

5. Select the tape transport mode with the reverse mode (REVERSE MODE) switch ④.

To repeatedly play both sides of the tape, set the switch to the " ↻ " position. To play only one side of the tape, set the switch to the " ⇉ " position.

6. Select the Dolby noise reduction systems with the DOLBY NR switch ⑦.

If the tape to be played was recorded with Dolby NR off, set the DOLBY NR switch to the OFF position. If the tape was recorded with Dolby B-type or C-type noise reduction, set the DOLBY NR switch accordingly to B or C.

NOTE:

When loading tapes with different Dolby NR settings, adjust to the appropriate settings as necessary during playback.

7. Start playback by pressing the appropriate play (▶ or ◀) button ⑱.

Single side playback (REVERSE MODE switch: ⇉)

To play the forward side of the tape (the left side):

Press the ▶ button.

To play the reverse side of the tape (the right side):

Press the ◀ button.

Double side playback (REVERSE MODE switch: ↻)

Press the ▶ button to begin playback from the forward side or press the ◀ button to begin playback from the reverse side.

- If you do not press one of the Cassette Number buttons, then the lowest numbered cassette will be loaded.

To stop playback

Press the stop (■) button ⑱.

To temporarily pause playback

Press the pause (▮▮) button ⑬. To resume playback, press the pause button again.

To fast-forward or rewind the tape

- Perform this operation when the unit is in stop mode. If the tape is playing, press the stop (■) button before carrying out this operation..
  When the FWD tape transport indicator is lit, press the ▶▶ button to fast-forward the tape toward the end, or press the ◀◀ button to rewind the tape toward the beginning.
  When the REV tape transport indicator is lit.
  Press the ▶▶ button to rewind the tape toward the beginning, or press the ◀◀ button to fast-forward the tape toward the end.

To search for the beginning of a selection

Press the ◀◀ or ▶▶ button during playback (Music Search — on page 16.)

RELAY PLAYBACK

The order of playback will go from the lowest numbered cassette to the highest numbered cassette if the RELAY button ⑮ is pressed during playback, or if the RELAY button ⑮ is pressed in the stop mode and then the Play (▶ or ◀) button ⑱ is pressed.

NOTE:

If a blank section is played back for approximately 15 seconds, the blank skip function will come into effect. The tape is automatically forwarded to the beginning of the next selection and then playback begins.

RANDOM PLAYBACK

If the RANDOM button ⑮ is pressed in the stop mode or in the playback mode, the playback of all cassettes on the tray will be in a random order. (The RANDOM indicator will light up). The unit will stop when one side (in the ⇉ mode) or both sides (in the ↻ mode) have been fully played back.

NOTE:

If a blank section is played back for approximately 15 seconds, the blank skip function will come into effect. The tape is automatically forwarded to the beginning of the next selection and then playback begins.

MUSIC SEARCH

By searching for and detecting the blank spaces between selections, the music search function can skip forward or backward to a designated selection and begin playing that selection automatically.
The music search function can skip forward or backward a maximum of 15 selections.

To return to the beginning of the current selection
When the tape running indicator (▷▷▷▷) is lit (during forward playback)
Press the ◀◀ button once to return to the beginning of the current selection.

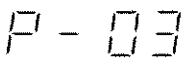
When the tape running indicator (◁◁◁◁) is lit (during reverse playback)
Press the ▶▶ button once to return to the beginning of the current selection.

To return to the beginning of a selection located before the current selection
When the tape running indicator (▷▷▷▷) is lit (during forward playback)
Press the ◀◀ button the same number of times as the number of selections to be skipped plus one.

When the tape running indicator (◁◁◁◁) is lit (during reverse playback)
Press the ▶▶ button the same number of times as the number of selections to be skipped plus one.

- To return to the beginning of the selection immediately before the current one, press the ◀◀ (or ▶▶) button twice. To return to the beginning of the selection located 2 selections before the current one, press the ◀◀ (or ▶▶) button three times.

Example:
When returning to the beginning of the selection located 2 selections before the current one, the display shows as follows.



To advance to the beginning of a selection located after the current selection
When the tape running indicator (▷▷▷▷) is lit (during forward playback)
Press the ▶▶ button the same number of times as the number of selections to be skipped.

When the tape running indicator (◁◁◁◁) is lit (during reverse playback)
Press the ◀◀ button the same number of times as the number of selections to be skipped.

Example:
When skipping to the beginning of the selection located 3 selections after the current one, the display shows as follows.

How to count the number of selections to be skipped
The music search function is a function which searches for and detects the blank spaces between selections in order to skip forward or backward to a designated selection. Accordingly, when the ◀◀ (or ▶▶) button is pressed once to skip back to the beginning of the current selection, the music search function searches for the blank section which exists in front of the current selection and starts playback from that location.
To skip to the selection immediately following the current selection, press the ▶▶ (or ◀◀) button once. The music search function searches for and detects the blank section located directly after the current selection and starts playback from that location. In the same manner, you can skip ahead to any other selection by simply counting the number of selections after the current selection that the desired selection is located.

To skip to the selection immediately before the current selection, press the ◀◀ (or ▶▶) button twice. The music search function searches for and detects the second blank section located before the current playback location. (The first blank section is located between the current selection and the preceding selection, and the second blank section is located between the preceding selection and the selection before it.) In the same manner, you can skip back to any other selection by simply counting the current selection as 1 and then adding the number of selections before the current selection that the desired selection is located.

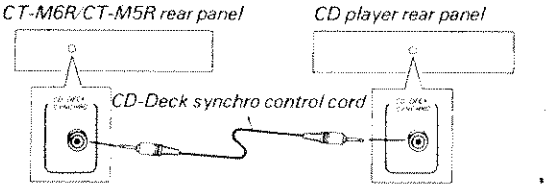
CD-DECK SYNCHRO RECORDING

This cassette deck has two synchro recording systems. One is for normal synchro recording, in which many compact discs can be recorded to one cassette tape. The other is for relay synchro recording, in which one compact disc is recorded to one cassette tape.

- CD-Deck synchro recording can be carried out when this unit is connected to a Pioneer CD player equipped with a CD-DECK SYNCHRO jack.

Connection

Connect the CD-DECK SYNCHRO jack of this unit to the CD-DECK SYNCHRO jack of the CD player using the supplied CD-Deck synchro control cord.



NOTES:

- *Keep the input and output jacks connected between the amplifier and this unit. Otherwise, the CD-Deck synchro recording cannot be carried out.*
- *Even when the CD player is connected to the amplifier with an optical fiber cable, connect the CD player to the amplifier or this unit with the input and output cords with pin plug.*

NORMAL SYNCHRO RECORDING

Program recording

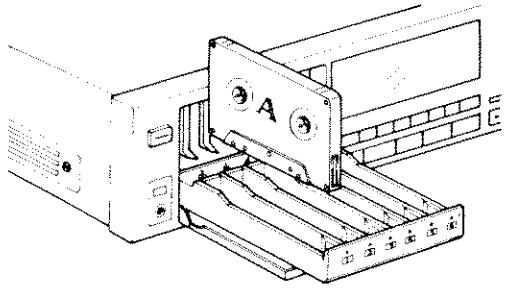
Program recording is possible to determine the order of recording if the CD player is programmed with multiple discs.

1. Load a compact disc into the CD player.

2. Place the cassettes on the tray.

Press the OPEN/CLOSE button ⑳ and the tray will automatically slide out. Insert the cassette so that the "A" side is on the left and the exposed (tape) side is facing down. The tray can hold up to 6 cassettes at once.

Make sure the erasure preventation tabs are intact.



3. Press the OPEN/CLOSE button ⑳ to close the tray.

4. Press one of the Cassette Number buttons ⑲ to load the cassette for recording.

5. Select the tape transport mode with the reverse mode (REVERSE MODE) switch ④.

To record on both sides of the tape, set the switch to the " ⊂ " position. To record on only one side of the tape, set the switch to the " ⥱ " position.

6. Select the Dolby noise reduction systems with the DOLBY NR switch ⑦.

7. Press the recording (●) button ⑭ to enter the recording standby mode.

8. Press the play button of the CD player.

9. Adjust the recording level. (→page 13)

10. Press the stop button ⑱ of this unit and the CD player.

- If this unit and the CD player are not in stop mode, CD synchro recording cannot be carried out.

11. Press the CD SYNCHRO button ⑪.

- The cassette deck begins recording and then the CD player starts playing about 10 seconds later.

When the compact disc finishes playing:

The CD player enters stop mode and the cassette deck enters recording-pause mode and then switches to stop mode after one minute. Change the disc and press the PLAY button on the CD player to resume the recording mode.

When the CD player changes discs (with twin-tray or multi-play CD players):

The cassette deck enters recording-pause mode (about one minute) and then starts recording again when the CD player starts playing the next disc. A 4-second blank section is automatically created between selections.

When the end of the tape is reached while the CD player is still playing:

The CD player returns to the beginning of the currently-playing selection and then enters the pause mode. To resume recording, load another tape and check the tape running indicator to ensure that the tape is moving in the desired direction. If not, press the playback (▶ or ◀) button to change the tape direction, then immediately press the stop (■) button. The tape running indicator will change direction. Synchro recording can be resumed by pressing the CD SYNCHRO button ⑪ again. (The CD SYNCHRO button should be pressed within 1 minute. If more than 1 minute elapses, the CD player will enter stop mode.)

When the auto-reverse mechanism operates while the CD player is still playing:

The CD player returns to the beginning of the currently playing selection and then enters the pause mode. The cassette deck will create a 4-second blank section and then begin synchro recording.

- The CD synchro function only works with Pioneer CD players designed for CD-Deck synchro operation.
- Be sure to connect this unit to the CD player using the supplied CD-Deck synchro control cord.

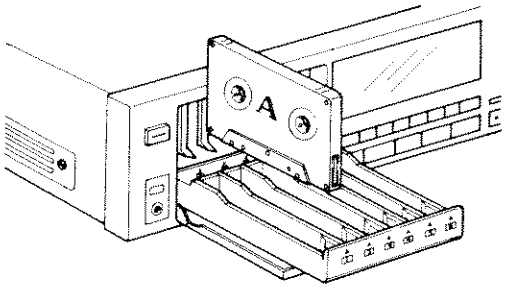
RELAY SYNCHRO RECORDING

NOTE:
During Relay Synchro Recording, program recording is only possible from each disc to one separate cassette.

1. **Load a compact disc into the CD player.**
2. **Place the cassettes on the tray.**

NOTE:
Insert cassette tapes with a recording duration longer than the playing time of the disc.

Press the OPEN/CLOSE button ⑳ and the tray will automatically slide out. Insert the cassette so that the "A" side is on the left and the exposed (tape) side is facing down. The tray can hold up to 6 cassettes at once. Make sure the erasure preventation tabs are intact.



3. **Press the OPEN/CLOSE button ⑳ to close the tray.**
4. **Press the ALL REWIND button ⑩ to rewind all cassette tapes to be recorded on.**
5. **Press one of the Cassette Number buttons ⑲ to load for recording first.**
6. **Press the RELAY button ⑮ to enter the relay mode.**
7. **Select the tape transport mode with the reverse mode (REVERSE MODE) switch ④.**

To record on both sides of the tape, set the switch to the " ⊂ " position. To record on only one side of the tape, set the switch to the " ⊐ " position.

8. **Select the Dolby noise reduction systems with the DOLBY NR switch ⑦.**
9. **Press the recording (●) button ⑭ to enter the recording standby mode.**
10. **Press the play button of the CD player.**
11. **Adjust the recording level.** (→ page 13)
12. **Press the stop button ⑱ of this unit and the CD player.**
- If this unit and the CD player are not in stop mode, CD synchro recording cannot be carried out.

13. **Press the CD SYNCHRO button ⑪.**
- The cassette deck begins recording and then the CD player starts playing about 10 seconds later.

When the compact disc finishes playing:
The CD player enters the stop mode and the cassette deck will change the next cassette tape and the deck enters the recording-pause mode and then switches to the stop mode after one minute. Change the disc and press the PLAY button on the CD player to resume the recording mode.

When the CD player changes discs (with twin-tray or multi-play CD players):
The cassette deck will change to the next cassette tape and the deck enters the recording-pause mode. The CD player will change the disc automatically.

When the end of tape is reached while the CD player is still playing:
The CD player will play until the end of the disc. The cassette deck enters the recording-pause mode until the CD player finishes playback.

If the relay synchro is not operating properly:
- If the CD SYNCHRO display and the 1—6 display flashes at the end of relay synchro, this is due to one of the following causes:

1 A tape with broken-off erasure prevention tabs was inserted.
2 The tape ran out before the end of the CD.
In the above cases, ☐ is displayed together with the relevant tape number. Example: [1]

NOTES:
- *If a cassette tape from which the erasure prevention tabs have been removed is in the tray, then the deck will skip that tape and relay to the next cassette tape.*
- *If a tape with broken-off erasure prevention tabs is present in the RELAY mode, the unit remains in the STOP mode until the disc has been completely played back. Then the CD SYNCHRO indicator flashes.*

TIMER RECORDING/PLAYBACK

From this cassette deck, three timer modes are available:
Timer Playback, Timer Recording and Timer Relay-recording.

Timer Playback
The deck is automatically set to the relay mode, starting with the smallest numbered cassette on the deck.

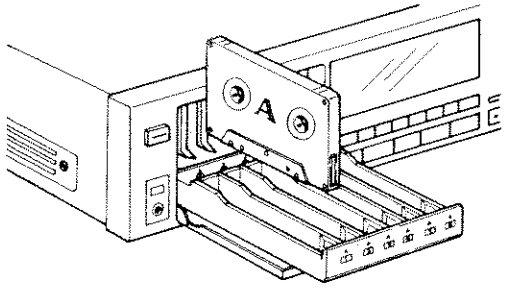
Timer Recording
Only one cassette can be recorded, the one which is already loaded in the tape transport mechanism.

Timer Relay Recording
Continuous recording beginning with the smallest numbered cassette on the tray.

TIMER RECORDING/TIMER RELAY RECORDING
(Unattended recording from a tuner, etc.)

1. **Press the POWER switch ①.**
2. **Place the cassettes on the tray.**

Press the OPEN/CLOSE button ⑳ and the tray will automatically slide out. Insert the cassette so that the "A" side is on the left and the exposed (tape) side is facing down. The tray can hold up to 6 cassettes at once.



3. **Press the OPEN/CLOSE button ⑳ to close the tray.**
4. **Press one of the Cassette Number buttons ⑲ to load the cassette for recording.**

For relay recording, press the Cassette Number button you want to recording first.

5. **Set the TIMER switch ⑯ to the REC position or the RELAY REC position for relay recording.**
6. **Select the DOLBY NR switch ⑦ to the desired position.**
7. **Select the desired transport mode using the REVERSE MODE switch ④.**
8. **To record the forward side of a tape, make sure that the tape running indicator (▷▷▷▷) is lit. To record the reverse side of a tape, make sure that the tape running indicator (◁◁◁◁) is lit.**
   Press the play (▶) button and immediately press the stop (■) button for forward recording.
   Press the play (◀) button and immediately press the stop (■) button for reverse recording.
   Double side recording (REVERSE MODE switch: ⊂⊃)
   Press the ▶ button. If the ◀ button is pressed, recording will stop after one side is recorded.
9. **Select the source to be recorded with the amplifier.**
10. **Press the record (●) button ⑭ and adjust the recording level.** (→ page 13)
11. **Press the stop (■) button.**
12. **Set the audio timer to the desired time.**

The power to the various components is cut off.
When the time set on the audio timer arrives, power is supplied to the various components and recording begins automatically.

Has one or both of the erasure prevention tabs been removed from the cassette?
Recording cannot be carried out if the erasure prevention tab for the side of the tape to be recorded on is not intact. Use a cassette that has its erasure prevention tabs intact.

TIMER PLAYBACK (automatically set to the relay mode)
(Wake-up playback, etc.)

1. **Press the POWER switch ①.**
2. **Place the cassettes on the tray.**

Press the OPEN/CLOSE button ⑳ and the tray will automatically slide out. Insert the cassette so that the front side (A side) is on the left and the exposed (tape) side is facing down. The tray can hold up to 6 cassettes at once.

3. **Press the OPEN/CLOSE button ⑳ to close the tray.**
4. **Press one of the Cassette Number buttons ⑲ to load the cassette for playback.**
5. **Set the TIMER switch ⑯ to the PLAY position.**
6. **Select the DOLBY NR switch ⑦ to the same position as recording.**
7. **Select the desired transport mode using the REVERSE MODE switch ④.**
8. **Press the play (▶) button.**

When the timer playback mode, the deck will start playback only from the FWD direction.
Adjust the volume and tone controls on the amplifier beforehand.

9. **Press the stop (■) button.**
10. **Set the audio timer to the desired time.**

The power to the various components is cut off.
When the time set on the audio timer arrives, power is supplied to the various components and playback begins automatically.

When the timer function is not being used
Be sure that the TIMER switch ⑯ is set to the OFF position. If the TIMER switch ⑯ is left at the PLAY, REC or RELAY REC position, playback or recording will automatically begin when the power is switched on.

Audio timer connections
Refer to the operating instructions supplied with the audio timer.

MAINTENANCE

When the head on the cassette deck is dirty, it is impossible to record or playback clearly. The sound will be distorted or the high frequency sounds will not be reproduced. Therefore, a clean head is always necessary.

Cleaning the Head (Use only a cleaning cassette tape available on the market.)

The heads, pinch rollers and capstans are parts which are liable to get dirty quite easily. Clean after every 10 hours of use.

Caution:
- Do not use the dry-type cleaning cassette tapes.
- After cleaning the head, do not load a cassette tape until the cleaning liquid is dried, which takes about 2 or 3 minutes.

CLEANING THE FRONT PANEL SECTION

Wipe the front panel and the cassette door when dusty or greasy with a soft cloth containing a small amount of ordinary liquid soap. Then, wipe dry with a cloth. Never use volatile spirits like thinners, benzine or alcohol because they will damage the panel finish.

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
POWER		
Cannot turn power on.	• The power plug is removed. • The component (stereo amplifier, audio timer, etc.) to which the power cord is connected is off.	• Insert the power plug correctly. • Turn the stereo amplifier or audio timer on.
REMOTE CONTROL UNIT (CT-M6R only)		
The remote control does not operate.	The system remote control cord is connected.	Send the remote control infrared signal to the remote control receiving unit of the system.
PLAYBACK		
Immediately stops.	• The tape is completely wound. • The tape is slack.	• Play back in the opposite direction. • Rewind the tape. • Take up tape slack (see page 4).
The level meter does not work.	• The tape is not recorded. • The tape head is dirty.	• Replace the tape with a recorded one. • Clean the head (see page 3, 20).
No sound	• The amplifier input selector is not correctly set. • The amplifier volume level setting is too low. • Connection problems (wrong connection, cord removed, poor contact, broken wire).	• Set the amplifier input selector correctly. • Turn the amplifier volume control up. • Connect securely.
RECORDING		
The recording indicator does not light up.	The cassette erasure prevention tabs are broken.	• Replace the cassette with one whose tabs are intact. • Cover the hole under the tab (see page 4).
The level meter does not work.	• The REC LEVEL control is set too low. • The amplifier is not delivering a recording signal (from the tuner, CD player, etc.). • Wrong connection, connection cord removed, poor contact, broken wire.	• Turn the REC LEVEL control up. • Set the amplifier recording output selector correctly. • Check connections.
Immediately stops.	• The tape is completely wound up. • The tape is slack.	• Record in the opposite direction. • Rewind the tape. • Take up tape slack (see page 4).
Cannot record.	The tape head is dirty.	Clean the head (see page 3, 20).
CD-deck synchro recording cannot be carried out.	CD-Deck synchro control cord and Input/Output cords are not connected.	Connect correctly (see page 18).
The CD SYNCHRO indicator is flashing.	• The cassette erasure preventation tabs are broken. • The tape has run out while in the CD-DECK SYNCHRO mode.	• Replace the cassette with one whose tabs are intact. • Replace the tape with a longer one.

SPECIFICATIONS

System ..... 4 track, 2-channel stereo
Heads ..... "Hard Permalloy" recording/playback head ×1
"Ferrite" erasing head ×1
Motor ..... DC servo motor (capstan) ×1
DC motor (reel, open/close, loading) ×3
Wow and Flutter ..... No more than 0.055% (WRMS)
No more than ±0.16% (DIN)
Fast Winding Time ..... Approximately 100 seconds (C-60 tape)

Frequency Response
—20 dB recording:
Normal tape ..... 20 to 17,000 Hz, ±6 dB
Chrome tape ..... 20 to 18,000 Hz, ±6 dB
Metal tape ..... 20 to 19,000 Hz, ±6 dB

Signal-to-Noise Ratio
Dolby NR OFF ..... More than 58 dB

Noise Reduction Effect
Dolby NR B type ON ..... More than 10 dB (at 5 kHz)
Dolby NR C type ON ..... More than 19 dB (at 5 kHz)

Harmonic Distortion ..... No more than 1.0% (0 dB)
Input (Sensitivity)
LINE (INPUT) ..... 63 mV (Input impedance 50 kΩ)
Output (Reference level)
LINE (OUTPUT) ..... 316 mV (Output impedance 5.8 kΩ)
Phones ..... 0.25 mW (Load impedance 8 Ω)
(CT-M6R only)

Subfunctions
- DOLBY NR B/C types
- DOLBY HX PRO (CT-M6R only)
- Music search over ±15 selections
- CD-Deck synchro recording capability
- Tape counter/Time counter
- Tape Remaining Time indicators (6 seg)
- FL peak level meter (8 seg + ∞)
- Automatic space recording mute
- One-touch recording pause
- Automatic tape selector
- Automatic reverse (Quick reverse)
- Phones jack (CT-M6R only)
- TIMER Recording/TIMER RELAY Recording/TIMER Playback
- System remote control compatible

[For CT-M6R, CT-M5R (U.S., Canadian, Australian and Multi-voltage models]
- Relay recording/Relay playback
- All rewind
- Cassette random playback
- Cassette scan playback

Miscellaneous
(CT-M6R)
Power Requirements
U.S., Canadian models ..... AC 120 Volts, 60 Hz
European model ..... AC 220 Volts ~, 50/60 Hz
U.K., Australian models ..... AC 240 Volts ~, 50/60 Hz
U.S. military and other destination models ..... AC 110 V/120 V ~ 127 V/220 V/240 V (switchable), 50/60 Hz
Power Consumption 25W
Dimensions ..... 420 (W) × 136 (H) × 372 (D) mm
16-9/16(W) × 5-3/8(H) × 14-5/8(D) in
Weight (without package) ..... 7.5 kg (16 lb 9 oz)

(CT-M5R)
Power Requirements
U.S., Canadian models ..... AC 120 Volts, 60 Hz
Other destination models ..... AC 110 V/120 V ~ 127 V/220 V/240 V (switchable), 50/60 Hz
Power Consumption 23W
Dimensions ..... 420 (W) × 130 (H) × 372 (D) mm
16-9/16(W) × 5-1/8(H) × 14-5/8(D) in
Weight (without package) ..... 7.4 kg (16 lb 5 oz)

Accessories
Operating instructions 1
Connection cord with pin plugs 2
CD-Deck synchro control cord 1
System remote control cord 1
[For CT-M6R, CT-M5R (U.S., Canadian, Australian and Multi-voltage models]
Remote control unit (CT-M6R only) 1
Dry cell batteries "AAA" [IEC-R03 (UM-4)] (CT-M6R only) 2

NOTE:
Specifications and design subject to possible modifications without notice due to improvements.

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